

Effect of Structured Teaching Programme on Knowledge Regarding Menstrual Hygiene among Adolescent Girls in Selected Colleges, Bangalore

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Abstract: Menstrual hygiene is important to be practiced by the school girls to promote their health and prevent illness. Inadequate menstrual hygiene management is connected with the use of cloth, ashes and husk sand during menstruation, thereby it causes severe reproductive health problem¹. According to World Health Organization (2015) there are about 74% of school girls had suffered with reproductive tract infection due to improper menstrual hygiene². The poor menstrual hygienic practices also leads to several problems among school going which include dropped out from the school, inability to continue the education and reduction of self-esteem³. The objectives of the study were to assess the pre-test and post-test knowledge scores regarding menstrual hygiene among adolescent girls. To determine the effectiveness of STP regarding menstrual hygiene among adolescent girls⁴. The research approach was evaluative. 30 adolescent girls from Dayananda Sagar Institute of polytechnic were selected by non-probability purposive sampling technique⁵. Data collection tools were socio demographic variables to collect the baseline data and self-administered structured questionnaire to assess the level of knowledge of adolescent girls regarding menstrual hygiene⁶. The tool was validated by experts from respective fields and reliability was assessed by split half method. Knowledge scores of adolescent girls were assessed. Data analysis revealed that there was significant improvement in the level of knowledge of postnatal mothers after structured teaching programme at ($P=0.05$)⁷.

Keywords: Structured teaching programme, menstrual hygiene, adolescent girls.

Introduction

Reproductive health is a crucial part of general health and a central feature of human development. Reproductive health deals with the reproductive processes, functions and system at all stages of life. Reproductive health is a universal concern, but is of special importance for women particularly during the reproductive years. Personal hygiene during menstruation explored including bathing and showering, and buying and using sanitary protection products.¹ WHO has defined Adolescence as the period between 10-19 years of life. Adolescent girls constitute about 1/5th total female population in the world. Adolescence in girls has been recognized as a special period in their life cycle that requires specific and special attention. This period is marked with onset of menarche.¹ Menstruation is a phenomenon unique to all females. Women having a better knowledge regarding menstrual hygiene and safe menstrual practices are less vulnerable to reproductive tract infections and its consequences.² The menstrual cycle, under the control of the endocrine system, is necessary for reproduction. It is commonly divided into three phases: the follicular phase, ovulation, and the luteal phase; although some sources use a different set of phases: menstruation, proliferative phase, and

secretory phase. Menstrual cycles are counted from the first day of menstrual bleeding.³ In the menstrual cycle, changes occur in the female reproductive system as well as other systems. A woman's first menstruation is termed menarche, and occurs typically around age 12-13. The average age of menarche is about 12.5 years. But is normal anywhere between ages 8 and 16.

Factors such as heredity, diet and overall health can accelerate or delay menarche. The end of a woman's reproductive phase is called the menopause, which commonly occurs somewhere between the ages of 45 and 55.⁴ In World Health Organization report is, poor menstrual hygiene in developing countries has been an insufficiently acknowledged problem. In several cultures there are taboos concerning blood, menstruating girls and women and menstrual hygiene. Approximately 50% of the world's population knows from their own experience how important good menstrual hygiene is to be able to function optimally during the menstruation period. Yet this is hardly realized by in particular politicians, programmers and policy makers. This is also surprising in view of the explicit relation of this issue to water and sanitation and the distribution of all kinds of diseases, which can be reduced considerably by good hygiene.⁵ The problem concerning menstruation and participation in the higher forms of primary (grade 4 & 5) and secondary education has several aspects. Sanitary facilities and waste management at schools, including the hygienic disposal of sanitary napkins and other protection alternatives, are so poor and unsafe that girls and female teachers prefer not to use these during their menstruation period. These problems are reinforced by local customs and cultural and/ or religious traditions and taboos concerning menstruation, especially in rural areas.⁶ Menstrual hygiene, a very important risk factor for reproductive tract infections, is a vital aspect of health education for adolescent girls. Educational television programmes, trained school nurses/health personnel, motivated school teachers and knowledgeable parents can play a very important role in transmitting the vital message of correct menstrual hygiene to the adolescent girl of today.⁶

Menstruation has often been dealt with secrecy in many cultures. And this custom leads poor and inadequate sanitary facilities. Girls not wish to attend the school during menstruation due to poor sanitation facilities and using of homemade cloth. As a result, they grow up with low self-esteem and disempowerment from poor educational attainment. In some studies, were found that students are often not aware of basic hygienic practices, such as washing hands before and after toilet use, drying the genital area, bathing position, preferred color and type of underwear and menstrual hygiene. Adolescent girls constitute a vulnerable group, particularly in India where female child is neglected one. Menstruation is still regarded as something unclean or dirty in Indian society. The reaction to menstruation depends upon awareness and knowledge about the subject. Although menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result into adverse health outcomes⁷. Hygiene-related practices of women during menstruation are of considerable importance, as it has a health impact in terms of increased vulnerability to reproductive tract infections (RTI). The interplay of socio-economic status, menstrual hygiene practices and RTI are noticeable. Today millions of women are sufferers of RTI and its complications. Inappropriate menstrual hygiene experience and adverse effect of menstruation on schooling and social life, use of unhygienic material as menstrual absorbent and unacceptable methods of disposal for menstrual absorbents were more common in girls. More girls who had no training disposed of their menstrual absorbents in farms and road side or by recycled them by washing than those who were trained.⁸

Aim

To promote good menstrual hygiene practices among adolescent girls.

Method

A pre experimental study was carried out in the month of Jan to march 2019 at Dayananda sagar institute of polytechnic college, Bangalore. By Non probability purposive sampling technique all the adolescent girls were selected and enrolled in study and sample constitute 30 adolescent girls. Study was approved by the ethical committee and written permission was taken from principal Dayananda

sagar institute of polytechnic, Bangalore. The tools used in the study included self-administered structured questionnaire consists of demographic data of 5 items and knowledge questionnaire, included 20 items to assess the knowledge level of adolescent girls related to menstrual hygiene and scoring sheet was developed that consisted total 20 score and for each item was scored from 0 to 1. Further the total score was divided into 3 categories based on the percentage gained by adolescent girls such as inadequate knowledge, moderate knowledge and adequate knowledge. The tools and the structured teaching programme plan of the study were developed after reviewing the literature and validated by experts in the field of nursing, obstetrics and gynecology. To check the feasibility of study a pilot study on 6 subjects was done and necessary changes were made in tools. The reliability of the structured questionnaire was estimated by spearman-brown prophecy formula and it was found to be $r=0.94$, which indicated that the tool was highly reliable. Data collection was done on 30 subjects in adolescent period. A Written consent was signed by each participant before taking part in study. The knowledge of the adolescent girls regarding menstrual hygiene was assessed by conducting pretest by using structured questionnaire. Then, on same day the each subject was given structured teaching programme on menstrual hygiene. In post interventional period post test was conducted by using that same structured questionnaire. Afterwards the data was analyzed using descriptive and inferential statistics. The various statistical measures used such as frequencies, percentage, mean, standard deviation and parametric tests i.e. paired 't' test.

Results

Table 1. Finding of demographic variables among adolescent girls (N=30)

Demographic variables	Frequency	Percentage (%)
Age		
10-15 Yrs	0	00
16-20 Yrs	30	100
21- 25 Yrs	0	00
Educational status		
Undergraduate	13	83.33%
Secondary School	7	23.35%
Graduate	0	0
P.U.C Pass	10	43.33%
Religion		
Hindu	27	90
Christian	0	0
Muslim	3	10
Age of first menstruation		
11- 12 Yrs	2	6.66
13- 14Yrs	26	86.66
15 Yrs and Above	2	6.66
Previous knowledge		
Yes	4	13.33
Little	21	70
No	5	16.7

Table 1 shows that the Finding of demographic variables of adolescent girls. With respect to the age, majority of the adolescent girls 30(100%) belongs to the age group of 16-20 years and no 10-15 years and 21-25 years girls were found during the study. With respect to education, majority of the adolescent girls 13(83.33%) were undergraduates, 10(43.33%) were completed PUC, 7(23.35%) were completed secondary school education and no graduates were found during the study. With respect to religion, majority 27(90%) were Hindu, only 3(10%) were Muslim and no other girls belongs to Christian religion. With respect to age of first menstruation majority 26(86.66%) had their

first menstruation at the age between 13-14 years, 2(6.66) had between 11-12 years and 2(6.66%) had it above 15 years. With respect to previous knowledge where 21(70%) had little knowledge, 5(16.7%) had no knowledge and 4(13.33%) had knowledge regarding menstruation.

Table 2. Comparison between the pre-test and post-test area wise knowledge level

Variable	Pre-test score			Post-test score			T value	Inference
	Mean	SD	Mean %	Mean	SD	Mean %		
Knowledge on menstrual hygiene	10.5	2.8	53.33	15.6	2.7	77.83%	7.17	S
S: Statistically significant at $P < 0.05$, $t(0.05, 29df) = 2.05$								

Table 2 shows the comparison between pre-test and post-test Knowledge scores. With regard to pre-test and, the mean is 10.5 with standard deviation 2.8 and mean percentage 53.33. With regard to post-test, the mean is 15.6 with standard deviation 2.7 and mean percentage is 77.83. The t-value is 7.17 at 5% level of significance, which is greater than the table value of 2.05 which concludes the effectiveness of structured teaching programme on knowledge regarding menstrual hygiene. Hence the hypothesis H_1 -There will be significant differences between pre-test and post-test knowledge scores regarding menstrual hygiene is accepted.

Discussion

Menstrual hygiene plays important role in all adolescent girls' life. Hence proper management of menstruation is essential in order to rectify the reproductive tract infections. The following conclusions were drawn on the basis of the findings of the study which revealed that, With respect to the age, majority of the adolescent girls, 30(100%) belongs to the age group of 16-20 years and no 10-15 years and 21-25 years girls were found during the study. With respect to the educational status, majority of the adolescent girls 13(83.33%) were undergraduates, 10(43.33%) were completed PUC, 7(23.35%) were completed secondary school education and no graduates were found. With respect to the religion, majority 27(90%) were Hindu, only 3(10%) were Muslim and no other girls belongs to Christian religion. With respect to the age of first menstruation age, majority 26(86.66%) had their first menstruation at the age between 13-14 years, 2(6.66) had between 11-12 years and 2(6.66%) had it above 15 years. With respect to the prior knowledge regarding menstruation, majority 21(70%) had little knowledge, 5(16.7%) had no knowledge and 4(13.33%) had knowledge regarding menstruation.

The study found that, the pre-test knowledge among 30 respondents, majority of the girls 18(60%) had inadequate knowledge, 10(33) girls had moderate knowledge and minority of the girls 2(7%) had adequate knowledge on Menstrual hygiene. The overall mean value was 10.5 with standard deviation 2.8. With respect to the post test among 30 respondents, majority 17(57%) girls had adequate knowledge, minority of the girls 13(43%) had moderate knowledge and no girls had inadequate knowledge on menstrual hygiene. The overall mean value was 15.6 with standard deviation 2.7. With regard to the effectiveness of structured teaching programme by comparing the pre-test and post-test knowledge scores on menstrual hygiene the post mean score was 15.6(77.83) with standard deviation 2.7 and mean percentage is 53.33 and the respondents post-test knowledge score were significantly higher than the mean pre-test knowledge scores 10.5(53.33) with standard deviation 2.813 and the mean percentage is 77.83.

The t-value is 7.17 at 5% level of significance, which is greater than the table value of 2.05 which concludes the effectiveness of structured teaching programme on knowledge regarding menstrual hygiene. And statistically highly significant at $P < 0.05$ level. The study concludes that the structured teaching programme is an effective method in providing moderate to adequate level of knowledge regarding menstrual hygiene to the adolescent girls to promote and to maintain their optimum level

of health. Similarly, a study was conducted to assess the impact of school based menstrual educational programme on menstrual knowledge among adolescent girls in Bangladesh. The sample of the study was 416 adolescent girls. The data was collected through questionnaire. The study finding reveals that after health education programme participant reported a significant improvement in high knowledge and beliefs score compared to baseline (51%vs 82.4%). Hence, the educational programme was effective in improving the knowledge of adolescent girls.

Conflict of interest

The authors declare no conflicts of interest.

References

1. Park K. Textbook of preventive and social medicine. M/s Banarasidas mot publisher. Jabalpur 16th ed; 2000.
2. United Nations Population Information Network (POPIN). Guidelines on Reproductive Health. Available from URL: <http://www.undp.org/popin>
3. Charles JW. Menstruation in girls and Adolescents: Using the Menstrual Cycle as a Vital Sign. The American Acad Pedia. 2006;November 1 (118):2245-2250.
4. Varina TT. Menstrual Hygiene A Neglected Condition for the Achievement of Several Millennium Development Goals. Zoeter. 2007 October 10.
5. Jharkhand MS. A Report on Menstrual hygiene management. UNICEF, Jharkhand in 2009.
6. Dasgupta A, Sarkar M. Menstrual hygiene: how hygienic is the adolescent girl?. Indian J Commun Med. 2008 April;33(2):77-80.
7. Omidvar S, Begum K. Factors influencing hygienic practices during menses among girls from south India-A cross sectional study. Int J Collaber Res Int Med Pub Heal. 2010;2(12):411-423.
8. Patali CS, Ronad S, Pinnapati SS. A Study to Assess the Effectiveness of Planned Teaching Program Regarding the Knowledge of Psycho Active Substance Abuse and its Consequences on General Health Among the College Students of Selected Colleges of Bagalkot. Int J Innov Sci Res Tech. 2018;3(11):25-29.

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